Receipt date: 08/15/2007

105953848ã (GA)U: 2818

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99) Application Number 10595384 Filing Date 2006-04-13 First Named Inventor Christopher Hess Art Unit 2857 Examiner Name Attorney Docket Number D5116-00051

U.S.PATENTS Remove											
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue D	)ate	Name of Pate of cited Docu	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear				
	1	6449749		2002-09	9-10	Stine					
		7024642 CONSIDERED EXCEP			THROU	,	·		Add		
If you wis	n to ac	ld additional U.S. Paten							Remove		
U.S.PATENT APPLICATION PUBLICATIONS  Remove											
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publica Date	ition	Name of Patentee or Applicant of cited Document		Releva		Lines where jes or Relev	
ALL REFI	1 20060101355 2006-05-11 Dennis Ciplickas et al REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.L./ (01/13/2012)										
If you wis	h to ac	dd additional U.S. Publis	shed Ap	plication	citation	n information p	lease click the Add	button	. Add		
				FOREIC	SN PAT	ENT DOCUM	ENTS		Remove		
Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup>		Kind Code <sup>4</sup>	Publication Date  Name of Patented Applicant of cited Document		or ,	where Rele	or Relevant	T5
	1										
If you wis	h to ac	ld additional Foreign Pa	itent Do	cument	citation	information pl	ease click the Add	button	Add		
NON-PATENT LITERATURE DOCUMENTS Remove											

Receipt date: 08/15/2007 10595384 - GAU: 2818 Application Number 10595384 Filing Date 2006-04-13 **INFORMATION DISCLOSURE** First Named Inventor Christopher Hess 2857 Art Unit ( Not for submission under 37 CFR 1.99) **Examiner Name** 

Attorney Docket Number

D5116-00051

OTAT		IT DV	ABBLIO	LAIT
<b>5   A  </b>	EIVIEN	41 BY	APPLIC/	M I
		— .		
		-		

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	Stapper, C. H., Rosner, R. J., "Integrated Circuit Yield Management and Yield Analysis: Development and Implementation," IEEE Transactions on Semiconductor Manufacturing, pp. 95-102, Vol. 8, No. 2, 1995	
	2	Ipri, A. C., Sarace, J. C., "Integrated Circuit Process and Design Rule Evaluation Techniques," RCA Review, pp. 323-350, Volume 38, Number 3, September 1977	
	3	Buehler, M. G., "Microelectronic Test Chips for VLSI Electronics," VLSI Electronics Microstructure Science, pp. 529-576, Vol. 6, Chapter 9, Academic Press, 1983	
	4	Doong, K., Cheng, J., Hsu, C., "Design and Simulation of Addressable Failure Site Test Structure for IC Process Control Monitor," pp. 219-222, International Symposium on Semiconductor Manufacturing, 1999	
	5	Hess, C., Weiland, L. H., "Influence of Short Circuits on Data of Contact & Via Open Circuits Determined by a Novel Weave Test Structure," IEEE Transactions on Semiconductor Manufacturing, pp. 27-34, Vol. 9, No. 1, 1996	
	6	Hess, C., Stashower, D., Stine, B. E., Weiland, L. H., Verma, G., Miyamoto, K., Inoue, K., "Fast Extraction of Defect Size Distribution Using a Single Layer Short Flow NEST Structure", IEEE Transactions on Semiconductor Manufacturing, pp. 330-337, Vol. 14, No. 4, 2001	
	7	Walton, A. J., Ward, D., Robertson, J. M., Holwill R. J., "A Novel Approach for an Electrical Vernier to Measure Mask Misalignment", pp. 950-953, 19th European Solid State Device Research Conference ESSDERC '89, Springer Verlag, 1989	
	8	Hess, C., Stine, B. E., Weiland, L. H., Mitchell, T., Karnett, M., Gardner, K., "Passive Multiplexer Test Structure For Fast and Accurate Contact and Via Fail Rate Evaluation", pp. 163-167, Proc. International Conference on Microelectronic Test Structures (ICMTS), Vol. 15, Cork (Ireland), 2002	
	9	Walton, A. J., Gammie, W., Marrow, D., Stevenson, J. T. M., Holwill, R. J., "A Novel Approach for Reducing the Area Occupied by Contact Pads on Process Control Chips", International Conference on Microelectronic Test Structures, San Diego, (USA), 1990	
	10	Hess, C., Weiland, L. H., Bornefeld, R., "Customized Checkerboard Test Structures to Localize Interconnection Point Defects", Proc. VLSI Multilevel Interconnection Conference (VMIC), pp. 163-168, Santa Clara (USA), 1997	

Examiner Signature	ignature	/Dung Le	e/ (01/13/2012)		Date Considered			
			EXAMINER SIGNA	TURE				
If you wish to	o add a	dditional non-patent literatu	re document citation info	rmation	n please click the Add I	outton Add		
18 ALL REFEREN	o Inte	are, J., Maly, W., Griep, S., Scl ernational Conference on Micro DNSIDERED EXCEPT WHER	pelectronic Test Structures,	Vol. 7, 8	San Diego, USA, 1994	aracteristics",		
17	Ward, D., Walton, A. J., Gammie, W. G., Holwill, R. J., "The Use of a Digital Multiplexer to Reduce Process Control Chip Pad Count", International Conference on Microelectronic Test Structures, Vol. 5, San Diego (USA), 1992							
16	Doong, K., Hsieh, S., Lin, S., Shen, B. Cheng, J., Hess, C., Weiland, L., Hsu, C., "Addressable Failure Site Test Structures (AFS-TS) for CMOS Processes: Design Guidelines, Fault Simulation, and Implementation", IEEE Transactions on Semiconductor Manufacturing, pp. 338-355, Vol. 14, No. 4, 2001							
15	Hess, C., Weiland, L. H., Lau, G., Simoneit, P., "Control of Application Specific Interconnection on Gate Arrays Using an Active Checkerboard Test Structure", Proc. International Conference on Microelectronic Test Structures (ICMTS), pp. 55-60, Trento (Italy), 1996							
14	Hess, C., Weiland, L. H., "Drop in Process Control Checkerboard Test Structure for Efficient Online Process Characterization and Defect Problem Debugging", Proc. International Conference on Microelectronic Test Structures (ICMTS), pp. 152-159, San Diego (USA), 1994							
13	Hess, C., Weiland, L. H., "Harp Test Structure to Electrically Determine Size Distributions of Killer Defects", IEEE Transactions on Semiconductor Manufacturing, pp. 194-203, Vol. 11, No. 2, 1998							
12		ss, C., Weiland, L. H., "Strateg c. International Conference on						
11		es, C., Weiland, L. H., "Defect l at Structure", Proc. Internationa						
			,					
			Attorney Docket Numb	er	D5116-00051			
( Not for submission under 37 CFR 1.99)			Art Unit 2857  Examiner Name					
STATEM	<b>IENT</b>	BY APPLICANT	First Named Inventor	Cilisi	opher Hess			
INFORM	IATIO	N DISCLOSURE	Filing Date		2006-04-13			
receipt a	iate: 1	08/15/2007	<u> </u>					
Receipt d	late:	08/15/2007	Application Number		10595384 105	595384 - GAU: 2	281	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> See Kind Codes of USPTO Patent Documents at <u>www.USPTO.GOV</u> or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.

Receipt date: 08/15/2007	Application Number		10595384	10595384 - GAU: 2818
	Filing Date		2006-04-13	
INFORMATION DISCLOSURE	First Named Inventor Chris		stopher Hess	
STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Art Unit		2857	
(Not for Submission under or of it 1.00)	Examiner Name			
	Attorney Docket Number		D5116-00051	

**CERTIFICATION STATEMENT** 

Plea	ase see 37 CFR 1	.97 and 1.98 to make the appropriate selection	on(s):				
	That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).						
OR	1						
	foreign patent of after making rea any individual de	information contained in the information difice in a counterpart foreign application, an sonable inquiry, no item of information contaesignated in 37 CFR 1.56(c) more than the 7 CFR 1.97(e)(2).	d, to the knowledge of the ained in the information dis	e person signing the certification sclosure statement was known to			
	See attached cer	tification statement.					
	Fee set forth in 3	7 CFR 1.17 (p) has been submitted herewith	ı.				
×	None						
	ignature of the ap n of the signature.	SIGNAT plicant or representative is required in accord		8. Please see CFR 1.4(d) for the			
Sigr	nature	/Richard A. Paikoff/	Date (YYYY-MM-DD)	2007-08-15			
Name/Print         Richard A. Paikoff         Registration Number         34,892				34,892			
pub 1.14 app	lic which is to file ( 4. This collection i lication form to the	mation is required by 37 CFR 1.97 and 1.98 (and by the USPTO to process) an applications estimated to take 1 hour to complete, inclued USPTO. Time will vary depending upon the is form and/or suggestions for reducing this	n. Confidentiality is gover ding gathering, preparing a e individual case. Any con	ned by 35 U.S.C. 122 and 37 CFR and submitting the completed nments on the amount of time you			

Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria**,

VA 22313-1450.

Receipt date: 08/15/2007 10595384 - GAU: 2818

## **Privacy Act Statement**

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
  - 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.